Application No. 09/463,890

Amendment in Reply to Advisory Action

### REMARKS/ARGUMENTS

# The Pending Claims

Upon entry of this amendment, claims 36, 37, 40-70, 73, and 74 will be pending. Claims 36, 37, and 40-50 are directed to a bacterial artificial chromosome (BAC). Claims 51-56 are directed to a cell comprising the BAC, and claims 57-66 are directed to a method of producing the BAC. Claims 67-70 are directed to a method of mutagenizing an infectious herpes viral genomic sequence in the aforementioned BAC. Claims 73 and 74 are directed to an isolated or purified infectious herpes virus genomic sequence produced by the aforementioned method of mutagenizing an infectious herpes viral genomic sequence.

# The Amendments to the Specification

The specification has been amended to include the substitute Sequence Listing filed on September 1, 2005. The substitute sequence listing contains SEQ ID NO: 1 and SEQ ID NO: 2. SEQ ID NO: 1 corresponds to the nucleic acid sequence denoted "KnS/rev." in Figure 23b, while SEQ ID NO: 2 corresponds to the nucleic acid sequence denoted "MCMV" in Figure 23b. Accordingly, no new matter has been added by way of the substitute sequence listing.

#### The Amendments to the Claims

The claims have been amended such that they more clearly comport with the subject matter disclosed in the subject application and the German priority application. In particular, claim 36 has been amended to recite a bacterial artificial chromosome (BAC) containing bacterial nucleic acid sequences and an infectious herpes virus genomic sequence larger than 100 kb, wherein the BAC enables replication of the infectious herpes virus genomic sequence in a host cell. This amendment is supported by the specification at, for example, pages 3 and 4, bridging paragraph, page 4, lines 3-5, page 5, lines 25-29, and Example 1. The language of the dependent claims has been amended to make them consistent with the amendment to claim 36. In addition, claim 67 has been amended to recite a method of mutagenizing the infectious herpes virus genomic sequence in the BAC of claim 36 comprising (a) introducing the BAC of claim 36 into a bacterial host cell, and (b) exposing the BAC to mutagenizing DNA molecules. This amendment is supported by the specification at, e.g., page 7, lines 1-

Application No. 09/463,890

Amendment in Reply to Advisory Action

12, and Example 2. Claims 73 and 74 are new and correspond to cancelled claims 71 and 72, and are supported by the specification at, e.g., page 8, lines 4-7. Accordingly, no new matter has been added by way of these amendments.

## The Advisory Action

The Advisory Action maintains the rejections of the claims under 35 U.S.C. §§ 102(a) and 102(c) because the subject matter of the rejected claim allegedly is not supported by the German priority application. In addition, the sequence listing filed on September 1, 2005 allegedly does not comply with 37 C.F.R. §§ 1.821-1.825 because the submission allegedly did not include a statement directing entry of the paper copy of the sequence listing into the specification. It is believed that the amendments to the specification made herein render the rejection of the sequence listing moot. Reconsideration of the rejections under Section 102 is respectfully requested.

Discussion of Rejections Under 35 U.S.C. §§ 102(a) and (e)

Claims 36, 37, 40-43, 46-48, 50-51, 53-54, 56-64, and 67-72 remain rejected under Section 102(a) as allegedly anticipated by the Messerle 1997 reference. Claims 36, 43, 48, 51, 54, 57-60, and 63 remain rejected under Section 102(a) as allegedly anticipated by the Delectuse reference. Claims 36, 48, 51, 54, 57-60, 63-64, 67-69, and 71 remain rejected under Section 102(e) as allegedly anticipated by the '621 patent.

A publication qualifies as prior art under Section 102(a) if the publication was by another and occurred prior to the date of invention for the claims in issue. A patent qualifies as prior art under Section 102(e) if the patent has an effective U.S. filing date prior to the date of invention for the claims in issue. Here, the Messerle 1997 reference was published in December 1997, and the Delecluse reference was published in July 1998. The '621 patent allegedly has an effective U.S. filing date of February 26, 1998. However, the date of invention for the claims in issue is at least as early as August 1, 1997, i.e., before the publication dates of the Messerle 1997 reference and the Delecluse reference, and before the alleged effective U.S. filing date of the '621 patent, as demonstrated by the text of the German patent application to which the present application claims priority under 35 U.S.C. § 119.

AUG. 22. 2006 2:38PM 312 616 5700 NO. 7784 P. 14

Application No. 09/463,890

Amendment in Reply to Advisory Action

As is apparent from the English translation of the German patent application, the German patent application fully supports the pending claims. In this regard, the subject matter of claims 36, 57, and 67, as amended, is supported by the English translation of the German patent application at, e.g., page 3, lines 8-11, and page 3, line 34, through page 4, line 33, and page 5, lines 11-17, and Figure 1. Thus, it is clear that Applicants invented the subject matter of the pending claims prior to the publication of the Messerle 1997 reference and the Delectuse reference, and prior to the alleged effective U.S. filing date of the '621 patent. As a result, the Messerle 1997 reference and the Delectuse reference are not prior art to the pending claims under 35 U.S.C. § 102(a), and the '621 patent is not prior art to the pending claims under 35 U.S.C. § 102(e). See also M.P.E.P. § 2136.05.

Discussion of Rejections Under 35 U.S.C. § 103

Claims 37, 40-43, and 72 remain rejected under Section 103(a) as allegedly obvious over the '621 patent in view of the Messerle 1996 reference. As discussed above, the '621 patent is not prior art to the pending claims. Moreover, the Messerle 1996 reference does not disclose using a bacterial host cell that contains mutagenizing DNA molecules to produce BAC/MCMV hybrid molecules. Claim 72 has been cancelled. Thus, the invention defined by claims 36, 37, and 40-43 is not obvious in view of the cited references, whether considered alone or in combination. Applicants, therefore, respectfully request withdrawal of the Section 103 rejection of these claims.

### Conclusion

Applicants respectfully submit that the patent application is in condition for allowance. If, in the opinion of the Examiner, a telephone conference would expedite the prosecution of the subject application, the Examiner is invited to call the undersigned agent.

Application No. 09/463,890

Amendment in Reply to Advisory Action

Respectfully submitted,

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Date: August 22, 2006